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TRANSCRIPT OF

11

BUREAU OF LAND MANAGEMENT

12

FEDERAL HELIUM REGULATION MEETING

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22 January 17, 2001
Portland, Oregon

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2 BE IT REMEMBERED that the following

3 proceedings were held on

5 Wednesday, the 17th day of January, 2001, at the

6 Doubletree Hotel Lloyd Center, Holladay Room, 1000

7 N.E. Multnomah Street, Portland, Oregon,

8 commencing at the hour of 6:30 p.m.

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1 PROCEEDINGS

2 MODERATOR:

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4 This was kind of our long-shot
5 location, and we wanted to make sure we got
6 complete coverage across the United States, and
7 Portland is it, I guess.

8 As you can see, this is our third
9 meeting of five. The first one we had in
10 Amarillo, Texas, the second one in Houston, and
11 tonight in Portland, and we have two more
12 scheduled, one in Denver, Colorado, or Aurora,
13 outside of Colorado next Tuesday, and the last one
14 in Washington, D.C. on the following Thursday,
15 January 25th.

16 And our objective here is to, on the
17 front end of any regulatory development phase is
18 to get comments from the public before we get into
19 any substantive development of regulations. I
20 think certainly from our first two meetings, I

21 think it was apparent that the public, or
22 companies in general, maybe it was a little
23 foreign to them. I think they're typically more
24 used to government in general, BLM in particular,
25 developing regulations and then having meetings

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1 after that and being able to comment at that
2 period.

3 But we felt it was a good idea and
4 important to get some public comments ahead of
5 time, and that way we could ensure that before we
6 made any monumental decisions or directions in the
7 way we wanted to develop our new regs, that we get
8 the concerns of the public and the companies in
9 place early on in the process.

10 So that's what we're doing here. That's
11 what we're for tonight, is to go over the Federal
12 Helium Program and some of the concerns that we
13 have and some of the concerns that the public
14 might have.

15 First our authorities. The Helium
16 Program has been in place for many, many years,
17 since the 1920s it's been in place, but our
18 primary authority that we work under is the Helium

19 Act of 1960, which was the legislative vehicle
20 that directed then the Bureau of Mines to conserve
21 helium. We purchased about 32 billion cubic feet
22 under that program during the '60s and early '70s
23 that the government purchased through purchase
24 contracts with private industry, crude helium and
25 put it into storage.

5

1 Then in 1996, the Helium Privatization
2 Act was passed, and that directed the government
3 to get out of the helium refining business while
4 also selling the helium reserve that we now have
5 in place, that the government has in place, and to
6 sell it in such a way that it wouldn't disrupt the
7 private market in consultation with the industry.

8 That's part of what these public
9 meetings are for, to get those types of comments.

10 Some of the regulations that govern our
11 activities are 43 CFR Part 16, which is more of
12 the general regulations, and also Part 3195, which
13 deals specifically with our in-kind crude helium
14 sales.

15 The '96 act directed us to sell to
16 people or persons that sell refined helium to

17 federal agencies, these are contractors, an
18 equivalent amount of crude helium from reserve,
19 and that's what those regulations implement. And
20 we'll talk a little bit more about that as we go
21 along.

22 However, I do want to give you a bigger
23 picture of what we do at the Amarillo field
24 office. It's not just the helium program. We do
25 have some more traditional BLM functions.

6

1 BLM, in effect, took us over when the
2 Bureau of Mines was closed in 1995, and we came in
3 under as the Amarillo field office. As of
4 October 1 of 2000, we redistricted the boundaries
5 of the Amarillo field office to include Kansas,
6 the Oklahoma panhandle and west Texas. Our
7 responsibilities here are the inspection and
8 enforcement of federally-owned oil and gas
9 properties in this region, as well as some land
10 management responsibilities, the Crossbar
11 property, in particular, which is some helium
12 properties that we brought over from the Bureau of
13 Mines, as well as the four main helium-related
14 functions.

15 Primarily the rationale for

16 redistricting the Amarillo field office and the
17 Tulsa field office was that the proximity of
18 Amarillo was closer to southwestern Kansas and the
19 Oklahoma panhandle. We now have an engineering
20 technician located in Amarillo that does
21 inspection enforcement activities for the
22 subsurface minerals. It's more of a logistics
23 thing. We're in closer proximity to those areas
24 and we're going to be able to do a more
25 cost-effective job in that fashion.

7

1 The next area is the land management
2 possibilities, the Crossbar property, which is
3 about 12,000 acres northwest of Amarillo. It's
4 the only -- or not the only, but it's -- there's
5 not a whole lot of public land in Texas, and this
6 is an opportunity for BLM to open up and manage
7 some public property in a multi-resource type of
8 environment to the benefit of the panhandle
9 residents.

10 We're looking to implement standard BLM
11 regulations and rules in developing that property
12 and we're not, in throwing this regulatory open
13 for public meetings that we have now, we're not
14 really talking too much about the regulations,

15 we're not talking at all about the regulation of
16 that, but I wanted to give you a more complete
17 picture of what we do in Amarillo.

18 The first thing, task or function that
19 we do in Amarillo concerning the Federal Helium
20 Program is the storage and transmission of the
21 crude helium reserve. The Cliffside gas field is
22 a partially completed natural gas field that had
23 about 30 billion cubic feet of government-owned
24 helium left in the reserve. That's part of the
25 original 32 billion cubic feet that was purchased

8

1 in the '60s and '70s. There's also 4.5 million
2 cubic feet of privately owned helium that we store
3 under contract. This is surrounded by about
4 200 million cubic feet of natural gas.

5 Also part of the storage and
6 transmission program is our crude helium pipeline.
7 This was the pipeline that was built in the early
8 '60s to take the crude helium that was produced
9 from the Hugoton gas field and produce it south
10 for storage in the Cliffside gas field near
11 Amarillo.

12 You'll see the triangles represent
13 private helium refiners and the circles represent

14 privately owned crude helium extractors. Often
15 they're situated close to one another, to where
16 the crude helium extractor produces crude helium
17 from the natural gas going by the plant, and the
18 extractor either puts it into the pipeline or
19 sends it over to the refiner and the refiner
20 either takes the gas from the extractor or takes
21 the gas from the storage. And in doing so, we're
22 able to ensure that any crude helium not needed
23 immediately could be put into storage and later
24 recovered, or if there's not enough crude helium
25 capacity for a particular refiner, they're able to

9

1 pull helium out of storage. So it helps to
2 balance the flow of crude helium through the
3 system and make sure that there's enough helium
4 for the market.

5 We are undergoing some upgrades out at
6 the Cliffside gas field, putting in compression
7 and eventually a crude helium enrichment unit,
8 which will allow the government to produce that
9 privately owned as well as the government owned
10 helium when the market is ready for it.

11 Generally speaking, this is an area that

12 we're looking for regulations, but we pretty well
13 feel that the storage and transmission part is in
14 pretty good shape, but we would be interested in
15 any suggestions that you may have for improving
16 the processes that we're currently using for
17 storing private helium in the Cliffside storage
18 facility. That's one of the areas that we'd like
19 input from the public.

20 The next major area that we're seeking
21 input is our crude helium sales. And as I
22 mentioned before, we're in the midst of making
23 in-kind sales right now. Those are the
24 regulations, the Part 3195 regulation that we have
25 in place.

10

1 We're interested in getting your
2 feedback on how well those regulations are
3 operating, are there any things that we're
4 missing, do we need to improve those, and any
5 suggestions in that area.

6 The legislation, in particular the
7 Helium Privatization Act of 1996, also directed us
8 to sell down the reserves, starting no later than
9 2005 over the succeeding ten-year period. And

10 that's where we're needing a significant amount of
11 input from private industry in how would be the
12 best way to sell off that reserve.

13 It does -- the legislation does direct a
14 minimum market price and it requires that this
15 helium be offered for sale during that period of
16 time. And frankly, it's not likely that sales
17 will be made unless the market is ready for it.
18 We want to do that in the most cost-effective way
19 while following legislation. That's a big area
20 that we'd like your input.

21 This graph shows the U.S.-produced
22 helium refined sales over the last 15 years. The
23 blue shows the privately produced refined helium,
24 the green shows the Bureau of Mines, now the BLM's
25 refined sales, and where it's replaced in yellow

11

1 is our in-kind sales. So we've roughly swapped
2 government-produced refined helium with
3 government-produced crude helium.

4 Our next area that we're looking for
5 input is our helium evaluation and gas analysis
6 area. One of the things -- another one of the
7 things that we do is we keep up with helium

8 reserves across the country and to a lesser extent
9 the world.

10 This map shows all the various
11 helium-bearing fields across the United States.
12 Here you'll see the Hugoton field has a little
13 higher helium content in it.

14 And we've got real good data on the
15 helium that's being produced, being depleted and
16 that that's not being depleted, that that's being
17 recovered and that that's not being recovered.
18 However, we don't have a lot of good information
19 about what reserves are being produced around the
20 world, and we'd like to figure out a way to get
21 better data to confirm the location and amounts of
22 helium resources outside of the United States, and
23 I know that's a little bit more difficult thing to
24 do, but it's something we'd like some input on
25 costs on that.

12

1 We're also in a data collection mode,
2 and we have been for many, many years keeping up
3 with helium reserves, and any way to improve that
4 method is something that we would like to hear
5 more from you about.

6 The other part of the helium evaluation
7 and gas analysis is the gas analysis part. We
8 have a lab that's main purpose is to analyze gas
9 samples and analyze those for helium content. We
10 have a field survey that has roughly 20,000 gas
11 analyses, in particular for helium content, dating
12 back to 1917, and that's an ongoing database that
13 we keep up.

14 Also, the gas analysis group does our
15 gas analysis for the gas field as well as the
16 pipeline and the custody and transfer of the
17 helium among the private refiners and crude helium
18 extractors.

19 Something we'd be interested a little
20 more about with members of oil and gas interests,
21 is being willing to send replicate gas stream
22 samples to the BLM laboratory if requested.
23 Again, to get better data on the reserves and the
24 analysis of those is one of the things that we're
25 trying to improve.

13

1 The fourth and last major helium area
2 is keeping up helium production on federal lands.
3 This is probably the single biggest area where

4 we're wanting to get public and industry's input
5 in the regulatory area.

6 Some of the things that we keep up with
7 is we determine helium ownership rights, as well
8 as collect and audit fee sales and royalties.

9 A lot of the helium produced in this
10 mid-continent area, some of it is federally owned
11 helium, and federally owned helium that is
12 produced and extracted and sold, there's a royalty
13 or a fee that's due the government, and right now
14 we're trying to improve the method and standardize
15 the methods in which we do that.

16 This map also shows some other helium
17 refining capability in southwestern Wyoming,
18 eastern Utah and Colorado. These plants produce
19 helium from the gas field all the way to a refined
20 product. Some of it is on federal lands, and we
21 do get fee sales from that, primarily through
22 helium contracts that we have with those
23 companies, but is that the best way.

24 We want to be able to put some of our
25 policies and procedures into a regulatory-type

1 language to give us a little more of an

2 enforcement capability that is not as strong right
3 now.

4 Some of the issues that we would like
5 some feedback on, for instance, is it reasonable
6 to allow an 8 percent loss of helium from the
7 wellhead to the point of sale before seeking
8 compensation. We'd like your comments on that.

9 Can we use a similar method to the one
10 used to protect oil and gas to protect helium from
11 drainage. Is that applicable for the helium case
12 or could it be applied in that area.

13 Should we require a separate bond to
14 cover helium production or should we allow
15 operators to transfer oil and gas bonds to provide
16 bond coverage for helium.

17 Another area that we're interested in,
18 is there a way to encourage and enable economic
19 helium production and extraction when oil and gas
20 wells are plugged or are targeted for plugging.

21 What incentives should we establish to
22 encourage helium production from gas streams in
23 close proximity to extraction plants or in areas
24 with low BTU gas contents there.

25 These are very complex issues, and

1 before we start pulling things together on it,
2 we'd like to get as much input as possible from
3 the public at large.

4 This is a big task here, keeping up with
5 the helium produced on federal lands. It can be a
6 significant amount of helium that the government
7 and the taxpayers are not getting compensated for,
8 and right now we're trying to get our hands around
9 how much is that, and right now we need some help
10 in the regulatory phase to be able to come up with
11 that.

12 I talked about the traditional BLM
13 functions as well as the four main helium-related
14 functions.

15 At this point we'd like to get your
16 feedback from the public about this process and
17 what concerns that you might have.

18 I saw some of you shaking your head
19 several times. This is usually where I start
20 pleading with people to say something.

21 COMMENT: At one time we were
22 able to purchase helium, purchase the helium for
23 storage, but you're --

24 MODERATOR: The question is, at one
25 time we were allowed to purchase helium, and that

16

1 was part of the Helium Act of 1960. We purchased
2 about 32 billion cubic feet of helium, we spent
3 about \$270 million that we borrowed from the
4 treasury to pay for that, another third was paid
5 out of excess revenues generated by the sale of
6 refined helium during that time.

7 In '72 or '73, before my time, but at
8 some point in time, the secretary of interior
9 said, we've got enough helium, and they stopped
10 it. But the purchase contracts were for 20 years,
11 I believe, and there's still another ten years or
12 so to go on those contracts.

13 Well, there was lawsuits and all of
14 that, and those weren't settled -- they were
15 settled about ten years ago or so, but basically
16 the purchasing stopped by the secretary saying we
17 had enough.

18 But since the Helium Privatization Act
19 passed, that rescinded our authority to purchase
20 helium on the market level.

21 COMMENT: So where is the

22 incentive to conserve then and to go to more
23 markets like southeastern New Mexico? Where is
24 the incentive now for conserving it?
25 MODERATOR: Where is the incentive now

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1 for conserving the helium? Well, when the 1960
2 act passed, the primary market for refined helium
3 was the government. There's a very small amount,
4 minuscule amount that was out there private-wise.

5 One of the things that that act did was
6 to raise the price of refined helium from \$16 to
7 \$35, thereabouts. So that increased what one
8 could get for refined helium, and then immediately
9 it created an incentive for private companies to
10 come and start refining helium themselves. Also,
11 as the market developed, the private demand for
12 helium increased dramatically.

13 Now, the price, the going price for
14 refined helium is about 45 to \$50 per thousand
15 cubic feet. If they were to recover that helium
16 and pay us a royalty or a fee or whatever
17 arrangement, they would get a significant amount
18 of revenue from it.

19 Now, I know natural gas prices have

20 increased quite dramatically here just in the last
21 six months or so, but still refined helium is
22 quite a bit higher, even still than the higher
23 price of natural gas. So there's a market in
24 there for the helium. We're expecting the demand
25 for refined helium to continue to grow, as it has

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1 over the last several years, as it has for many
2 years, and with that market there for the refined
3 helium, there will be a rate of return that should
4 provide an incentive for companies to go after, to
5 recover that helium.

6 Does that answer your question?

7 As far as the southeastern New Mexico --

8 COMMENT: Well, or anywhere

9 else that there's natural gas that has enough
10 helium content there and is extracted, you know,
11 how do we -- what do we do to get it extracted?

12 MODERATOR: I guess I'm curious, you
13 would think if it was economically viable, they
14 would be there already, private industry would be
15 in the southeastern New Mexico, trying to do that.
16 Do we know why they're not? I don't. I don't
17 know the answer to that. Surely they know it's

18 there.

19 COMMENT: You said that, you
20 know, on the lease itself, you know, helium is not
21 part of the oil and gas rights that they had in
22 the lease.

23 MODERATOR: Right. But oftentimes when
24 they have interest, they'll come to us and say,
25 "How can we get a lease?"

19

1 Have we had
2 anyone say, "We'd like the Pecos slope"? Is that
3 what we're talking about?

4 COMMENT: I'm not sure
5 where --

6 RESPONSE: We have had people
7 in some of the low BTU gas areas inquire about
8 helium, but right now because we do not have
9 incentives clearly defined in our regs to give
10 them incentive and they realize that it does not
11 belong to anyone but the federal government,
12 there's a lot of speculation, and it's not defined
13 clearly enough to allow them to always evaluate
14 the economics in a clear way, and we're hoping
15 that our regs will help set that out, so that in

16 those low BTU areas where the helium would be
17 worth extracting, they'll be able to look at the
18 regs and work more readily to determine if it is
19 economical or not. Right now we don't have that.

20 MODERATOR: That would be something
21 that we need to address, certainly.

22 Anybody else?

23 COMMENT: I've got a question.

24 In the remote areas like the field in Utah where
25 the private industry, they're extracting and

20

1 processing and selling, obviously they have a
2 helium contract. What does that require of them
3 in terms of sales? What are the restrictions?
4 Are there any restrictions on who they have to
5 sell to?

6 MODERATOR: No. I mean, they recover
7 it, they can sell it to whoever they want to.
8 They're responsible for producing it in an
9 efficient manner, and we check that on a monthly
10 basis, but who they sell it to is totally up to
11 them. We get our fee off of it.

12 And I was talking a little bit earlier,
13 that's one of the plants that you're mentioning is

14 off of the pipeline system. And I'll go back to
15 the picture so you'll be able to see.
16 The Moab plant there is off of the
17 pipeline system, as well as some of these others,
18 and from a total conservation standpoint, ideally
19 the refined helium produced from these plants will
20 be sold and not have any wasted or vented, and the
21 helium from these refiners down here (indicating)
22 would make sure that these are fully loaded and
23 sold before these (indicating), so that if there
24 is excess capacity, refining capacity that's not
25 being used, or excess crude helium that's being

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1 produced and not being refined, then if it's along
2 the system it can go into storage and be produced
3 back out next week or next month or three years
4 from now.

5 And that's been one of the benefits of
6 this system, is being able to have the ability to
7 take the excess crude helium, as well as produce
8 crude helium back to the plants when they needed
9 it to really stabilize the price of helium over
10 the many years of the program.

11 When I hear a question, I'll try to
12 answer it and then try to embellish it a little

13 bit more.

14 Now, everybody has to have a question

15 before we go. That's how we'll do it.

16 COMMENT: How do y'all

17 think you're going to get kicked off? I mean, do

18 y'all see the oil and gas regs as kind of the

19 starting point? Once we get through with all the

20 regs, what do y'all envision as being a starting

21 point, starting to get the development going?

22 RESPONSE: The helium

23 industry, what we are required to do with

24 regulatory actions is pretty much to mirror what

25 the Helium Conservation Act or law is in the

22

1 program. So what we'll do to compare the oil and

2 gas regs program is to identify those areas where

3 we obviously are in conflict, where the regs are

4 not clear between the two, and to attempt to clear

5 those up and separate them.

6 COMMENT: That will be

7 kind of the main focus starting off, is to define

8 the conflict between the two?

9 RESPONSE: Well, to start off

10 we'll be establishing the parameters for our

11 program to mirror what the law tells us we can do
12 with it. Then in order to strengthen that we'll
13 be looking at the conflicts.

14 There's a lot of confusion that because
15 helium is found in the natural gas stream, that it
16 is handled just like oil and gas, but it's not.
17 It's a separate mineral and the helium industry
18 has its own requirements, and production
19 requirements are different from oil and gas.
20 Allocation of it is very different, fees are very
21 different than oil and gas. And we're hoping to
22 strengthen our regs by cutting -- by looking at
23 those conflicts and cutting them out.

24 MODERATOR: One thing I hadn't
25 mentioned when I was going through the slides was

23

1 the standard BLM oil and gas lease. Of course
2 there's a section in there that specifically
3 reserves the helium ownership to the government,
4 and there's another statement at the end part that
5 that particular exemption should be carried
6 forward to any contracts that the lessee makes.
7 And that's probably the most overlooked, easily
8 the most overlooked section of that lease.

9 People -- I don't know if they just blow by it or
10 they don't have any helium and they don't think
11 about it and it just doesn't happen. And that's
12 something that we have to face.

13 Yes, sir?

14 COMMENT: It sounds as though in
15 the '60s and in the '70s, when the government was
16 the primary consumer of helium, that they sort of
17 artificially set the price high to encourage
18 conservation, and it sounds as though private
19 industry has become much more of a source of the
20 demand.

21 Do you know how much of the demand is
22 private versus government now? And is the current
23 price maintaining itself, the economy maintaining
24 the price, or is it still sort of being elevated
25 artificially in terms of the purpose of

24

1 encouraging conservation?

2 MODERATOR: You asked two questions.
3 The first was, basically the purpose of the
4 original act was twofold: was to foster the
5 development of private industry, and it did that
6 by raising the price of helium; and the second was

7 yes, was to conserve helium by outright purchases
8 and by raising that price also, because it helped
9 private industry go out and look for more helium
10 and develop it more.

11 Those two aspects of the 1960 law were
12 very successful, very successful, to the point
13 where when we stopped producing refined product,
14 when the Bureau of Mines shut down their helium
15 refining capacity, we supplied about 8 percent of
16 the total market. So about -- it was about
17 250 million cubic feet of refined helium was
18 produced by the government for primarily
19 government functions: NASA, Department of
20 Defense, Department of Energy, those types of
21 things.

22 One of the rationales, or I think one of
23 the pushes for the Helium Privatization Act was to
24 get, you know -- was that you had a private
25 industry that could allegedly produce the refined

1 product more efficiently than the government, and
2 they certainly had the capacity to do that, so
3 philosophically was it right for the government to
4 still be in that business. And that's what the

5 Privatization Act basically did, is it got us out
6 of the refining business.

7 We still, it's probably -- the percent
8 of in-kind sales that we have that, in effect, is
9 government demand is probably a little bit less
10 than the 8 percent now. We have sold a little
11 over 200 million cubic feet of crude helium last
12 year, but the market is still growing. So, the
13 government demand is fairly stagnant or maybe
14 declining a little bit, but the demand for the
15 overall refining of helium continues to move on at
16 a 4 to 5 percent, 5 percent, you know, annually,
17 and about -- was it about a third or a fourth of
18 that, around a billion cubic feet is exported each
19 year, so U.S.-produced helium that is refined is
20 exported to Europe, Japan, wherever.

21 But more and more of the world market is
22 being covered by production of helium that's
23 non-U.S. And I can't tell you right now off the
24 top of my head what those numbers are.

25 But the price of the crude helium as

1 defined in the Helium Privatization Act is
2 defined -- there's a formula in there. It says

3 the minimum price shall be the amount of the
4 helium debt divided by the amount of helium in
5 reserve, adjusted by the Consumer Price Index from
6 December 1995. Okay.

7 Now, the helium debt is \$270 million
8 dollars that was borrowed from the treasury to
9 purchase that 32 billion cubic feet, and it was --
10 interest was charged on that over time to where it
11 increased to just about a little under \$1.4
12 billion dollars. So the majority of that is
13 interest that the government owed to itself. We
14 owe this to the Department of Treasury. There
15 weren't bonds taken out or anything else, it's
16 just a paper debt that one government agency owes
17 to the other.

18 Well, that legislation froze the debt in
19 October of '95, and we have this minimum pricing
20 that is stipulated. Right now our set price for
21 crude helium that we use for our in-kind sales is
22 \$50 per thousand cubic feet, for crude helium
23 underground in the reserve.

24 I told you earlier refined helium is
25 going for about 45 to \$50 for refined, grade A,

1 pure helium, FOB at the plant. So the crude
2 helium is about on the same par. It's roughly
3 doubled the current market for crude helium right
4 now, so there's not -- at this point the crude
5 helium the government sells is not competing with
6 the private market, and in doing so, it ensures
7 that crude helium or helium reserves elsewhere are
8 going to be produced first. And that's the
9 conservation part of it that's still a very
10 important part of that.

11 However, as we start to sell down the
12 reserve, as we offer it for sale -- that's a quote
13 from the legislation -- we have this minimum price
14 that we have to contend with. The market is not
15 going to buy it if the market is not ready for it.
16 So we'll offer it for sale, but what do we do with
17 it if it's not purchased? That's something we'd
18 like to hear some comments about.

19 And it says to do it in a straight-line
20 basis from no later than 2005 to 2015, so roughly
21 each year we could be offering for sale 2 and a
22 half to 3 billion feet of crude helium each year.
23 The market right now is 4 billion cubic feet. So
24 you're talking about putting an amount of crude

25 helium out there that's close to the current

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1 market for refined helium. Something has got to
2 give.

3 COMMENT: I was sitting
4 here trying to remember, the window, is it 2005 to
5 2015, that's the window, and actually you said at
6 the last meeting that it could even happen before
7 2005.

8 MODERATOR: Well, it says no later than
9 2005.

10 COMMENT: No later than
11 2005. It could even start before that. Okay.

12 MODERATOR: I don't foresee us making
13 any kind of open market-type sales until we go
14 through this regulatory process.

15 COMMENT: Right.

16 One of the things you just hit on that I
17 don't know that I've been able to really absorb
18 before, what does happen is -- what does happen if
19 it doesn't get bought? Okay. I know you
20 mentioned before that if it doesn't get -- that
21 you don't foresee us selling it off by 2015, and
22 you just said something about --

23 MODERATOR: Once you ask that, I don't
24 think it's necessarily not going to be sold off by
25 2015 -- I mean, it could -- but what I'm saying,

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1 in 2005, I don't think the market will be ready
2 for the 2 and a half to 3 billion.

3 COMMENT: Maybe I
4 misunderstood. I was thinking at one time you
5 didn't even think by 2015, that's kind of what it
6 sets as the goal --

7 MODERATOR: That's what the legislation
8 says.

9 COMMENT: So after that
10 2015, if it's not all gone, what happens? I mean,
11 what's the out that it gives, or is there one?

12 MODERATOR: The only out in the
13 legislation is it says there's a minimum price,
14 which allows -- that gives us discretion to set
15 something higher, and offering for sale. It
16 doesn't say you have to sell. Those are the only
17 two outs. It's solid on what happens after 2015.

18 COMMENT: Right.

19 MODERATOR: And one would speculate
20 that at that point what further legislation would

21 need to be implemented or not. I don't know.
22 Maybe the regulation needs to be designed in such
23 a way that --
24 COMMENT: That's what I
25 was getting at. That's where it would be at in

30

1 2015, if we still have the helium reserve because
2 we're not competitive because of the price or
3 whatever, will some new legislation will have to
4 be developed to --

5 MODERATOR: Or the regulations could be
6 developed in such a fashion as to handle that
7 scenario.

8 COMMENT: Okay. New
9 legislation or work with the use of the
10 regulations.

11 MODERATOR: Right.

12 COMMENT: You'll continue to
13 store it either way?

14 MODERATOR: Yes. The facility is
15 there, it's all in place.

16 COMMENT: But you'd be storing
17 not government helium but private?

18 MODERATOR: In effect, what will

19 happen, is as that helium is sold, it's just a
20 bookkeeping transaction basically. We take it out
21 of one account, put it in another, get paid for it
22 and it's there.

23 So over that time, if it goes as it's --
24 as the legislation says, we'll just be
25 transferring helium from one account to the other

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1 while producing a portion of it from year to year,
2 and presumably as the market of crude helium out
3 there starts to dwindle, because the Hugoton gas
4 field, Wrigley was projected to be depleted by
5 like 1985, but through other natural gas
6 discoveries and other enhancements that they've
7 done in the field, they've extended that life
8 tremendously.

9 But there is going to be a point in time
10 where it's going down, and it's starting to
11 decline right now. And as those other crude
12 helium that's available elsewhere starts to
13 diminish, industry will come to rely more and more
14 on the federal government's reserve that is -- by
15 legislation will be made available.

16 COMMENT: When you say from one

17 account to another, are you saying from federal

18 ownership to private ownership?

19 MODERATOR: Yes, sir. We'll be

20 transferring from one to the other.

21 COMMENT: When you were

22 talking a while ago about the market and going up,

23 the demand, I think you said like 4 to 5 percent a

24 year right now. Is there any certain area that

25 that new demand is going to be from or is it just

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1 the same people are needing more of it or -- I

2 know NASA, of course, is one of those, is the big

3 users with the space program.

4 MODERATOR: For the federal area. But

5 most of the growth is coming in the private

6 sector.

7 A big driver for refined helium, and

8 liquid helium in particular, are MRIs use liquid

9 helium to do their thing, and that for a long

10 time, that was a drive of a lot of the growth.

11 Now they're starting to get more and more wide,

12 helium being used for that, so there's some growth

13 there. But some of -- a lot of the newer MRI

14 technology is such that it -- they're more closed

15 systems and they're a lot more efficient at using
16 the liquid helium that you put in and they're not
17 having to be recharged as often.

18 But there are other things coming up,
19 new technologies that use it. There's a lot of
20 things out there, kind of in several years that
21 could potentially use a lot of helium. And it's
22 one of those things that it's a very cutting
23 edge -- it's involved in a lot of cutting edge
24 technologies, and it's hard for me to speculate,
25 anyway, about where it might be in the next few

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1 years. But there always seems to be something
2 that's driving the demand for helium. It's just
3 not for children's party balloons or the blimp at
4 the Super Bowl or anything. That's a very, very
5 minor use for it anymore.

6 COMMENT: I heard
7 ... make a comment a couple weeks earlier
8 in one of the groups that he was of the opinion
9 that, as federal agencies, perhaps we needed to be
10 encouraged to stretch instead of depleting the
11 storage. I think I heard him say that twice in
12 his message.

13 So is that the area where incentives
14 need to be looked at to encourage the actual
15 extractor production?

16 MODERATOR: Well, is that speculating
17 about policy?

18 COMMENT: I think you mentioned
19 it earlier when you said what we try to do is --
20 what industry does is they would rather that areas
21 in Utah, Wyoming and also Colorado use the helium
22 before it is used out of storage.

23 MODERATOR: That certainly was, I
24 think, a major goal of the 1960 act, was to
25 encourage conservation of helium, and I don't see

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1 that goal changing with the passage of the '96
2 act. I think that's still a major goal of our
3 administration.

4 And what I would say is that anything we
5 can do to encourage that, I think would a good
6 thing, because helium is a nonrenewable resource.
7 Eventually at some point we're going to run out of
8 it, and it may be a while down the road, but my
9 crystal ball is not very good at stuff like that,
10 and it's hard for me to be able to tell how long

11 of a reserve we might have. I think it is used in
12 a lot of high-tech stuff, chip -- computer chip
13 fabrication, fiber optics, a lot of high-tech
14 stuff that there's a large demand for it, and I
15 think it's important that we create any incentives
16 we can to conserve helium.

17 COMMENT: So you're actually
18 seeking more suggestions for different types of
19 incentives?

20 MODERATOR: Yes.

21 COMMENT: But does it really
22 happen where they normally sell the helium from
23 Wyoming, Utah and these other areas, they're all
24 in competition with each other, so I'm sure these
25 going down in Hugoton field are trying to sell

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1 their helium. So how do you control that?

2 MODERATOR: These guys up here, they're
3 more wholesalers of refined helium. They sell to
4 the same -- to the refiners down here
5 (indicating). The refiners down here are the
6 distribution network. They're the people that
7 sell it to the hospitals or to the labs or
8 whatever, and they have contracts with these

9 people to buy the helium on a wholesale basis.
10 These guys don't want to be in the helium
11 marketing business (indicating). But they're
12 refining helium and they're selling it on a
13 wholesale basis to the refiners down here
14 (indicating) that are in the helium marketing
15 business and also other gas marketing businesses,
16 and helium is a part of their business, in a lot
17 of cases a very small part, but it's a very
18 lucrative part.

19 COMMENT: So they're more
20 concerned because they're suppliers to the people
21 down here more than selling competitively against
22 these people?

23 MODERATOR: Well, they certainly
24 compete against one another.

25 COMMENT: Okay.

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1 MODERATOR: But the people down here
2 that refine buy from up here, and it's a matter of
3 them saying, okay, do we want to have a shipment
4 come out of southwestern Wyoming or from central
5 Kansas. And if there's -- if they've got some
6 helium here to buy, they can ship it out of there

7 and then just put -- tune back their refinery up
8 in central Kansas and just let the helium go into
9 their storage account and eventually making it
10 down to the field.

11 Or it might just be a matter of going
12 down the pipeline and coming out at another
13 refinery. That pipeline allows communication
14 amongst themselves, even though it passes custody
15 transfer into our pipeline, it's our
16 responsibility. But it may never reach the field.
17 And frankly, in the way it's been going, it
18 doesn't. We've been producing out of the field
19 quite a bit.

20 I mentioned, I think last week, last
21 year, this past year, 2000, was the first year
22 that we produced 1 billion cubic feet of helium
23 from the field, the first time we've done that
24 over a calendar year. And I think that's an
25 indication of the direction that the helium is

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1 going. It's definitely coming out of storage,
2 private storage accounts in a big way.

3 A part of that is what I mentioned
4 before about the higher prices of natural gas.

5 Well, what the speculation is, is that the
6 companies can get more for that natural gas, so
7 they're not taking liquids out of it, and in the
8 process of taking liquids out is when they recover
9 the helium. So they're just letting all the
10 heavier hydrocarbons go because they can get more
11 for natural gas. And that's been hurting the
12 helium recovery aspect of it.

13 Is there an incentive possibly in there?
14 If you've got helium in your stream, is there an
15 incentive to combat the higher price of natural
16 gas? I don't know. That's a thought.

17 COMMENT: So basically the
18 way it is right now, with natural gas being the
19 price it is, it's basically noneconomical to strip
20 out the helium because of the price they're
21 getting for the natural gas?

22 MODERATOR: Well, I'm sure that -- I
23 would suspect that the helium is part of the
24 calculation, but it's probably more of a secondary
25 thing. They're more looking at the propane, the

1 ethane, the pentanes, all that stuff, that if they
2 don't take -- if they take that out, that BTU

3 content is with the natural gas, and they get more
4 for that, where compare that against if they
5 stripped that out, what they could sell those
6 components for and the helium, and how does that
7 compare to the price they get just for the natural
8 gas, back -- taking out your operating costs and
9 all that sort of thing.

10 Each one, I'm sure, has their model
11 where they figure out, based on our plant
12 operating costs, what we would get for the various
13 components and all that sort of thing, at what
14 point do we take it out or do we let it go.

15 And I think it's had a definite impact.
16 We've seen in the last six months the amount of
17 helium coming out of storage has skyrocketed.

18 COMMENT: You just
19 mentioned that the helium -- I think that's what
20 you said -- has skyrocketed basically in the
21 demand out of the plants? Is that what you said
22 in the last six months because of the natural gas?

23 MODERATOR: The demand for crude
24 helium, private crude helium out of the field has
25 increased dramatically this last year.

1 COMMENT: Okay.

2 MODERATOR: And our thoughts were,
3 based on the high price of natural gas.

4 COMMENT: With that in
5 mind --

6 MODERATOR: There also has been some
7 problems at some of these plants over here
8 (indicating), where they're not producing as much
9 refined product, so that requires these -- the
10 plants along the system to ramp up.

11 COMMENT: So with that in
12 mind, have you looked at, have you forecasted as
13 to if this continued at this level for a certain
14 length of time, what kind of impact that's going
15 to have on the availability?

16 MODERATOR: Not down to numbers, but I
17 mean off my cuff I can say if it continues in the
18 way it is, that 2005 time frame might be a lot
19 more attractive. But I don't see where the price
20 of natural gas is going to stay that much higher.
21 If we have higher natural gas prices, there's
22 going to be more development, more natural gas
23 supply and then the price will come down.

24 COMMENT: Is the fact that

25 the Algerian plants are not -- did not extract and

40

1 produce as much as the previous years also have an

2 impact, a draw-down on the storage fields?

3 MODERATOR: That's my understanding,

4 that they also -- I think the prices for natural

5 gas liquids were depressed worldwide, and that

6 plant, the only reason why the plant in Algeria,

7 Northern Africa, that produces a significant

8 amount of refined helium, what makes that possible

9 is that they're processing natural gas and

10 liquifying it, and in the process of liquifying

11 that natural gas, it concentrates the helium to

12 the point where it makes it economical to take it

13 out.

14 Well, with the price of liquid natural

15 gas going down, it depressed some of their

16 production and consequently associated helium with

17 it. That's what I've heard.

18 COMMENT: What problems do

19 you foresee in transferring oil and gas bonds for

20 helium production?

21 MODERATOR: ... , what problems?

22 RESPONSE: That was a

23 possible suggestion that had come up to maybe look
24 into. There may be a lot of options, and that's
25 what we're asking for suggestions for.

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1 A couple that have come up were to have
2 a separate bonding program just for the helium
3 mineral, or would there be a possibility of
4 working some kind of -- cooperatively with oil and
5 gas, say it's a low BTU field and it's not going
6 to produce any more gas, can it be transferred if
7 it's a high helium area.

8 As we've said, there are a lot of areas
9 where we need to cut out conflict, and that would
10 also tie in like in areas where they're plugging
11 wells where there is low BTU gas content but the
12 helium could be high.

13 That's an area where we'd like comments,
14 if there are there areas like that, can we
15 transfer the bond and work jointly with the oil
16 and gas programs to allow economic production of
17 helium. That's an area we'd like some feedback
18 on.

19

20 COMMENT: I don't quite have my

21 question, but what is a federal agency?
22 MODERATOR: In the regulations right
23 now, a private helium -- a company or person that
24 sells -- it's called a major requirement of helium
25 to a federal agency or a contractor, what we

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1 define what major requirement of helium was, it
2 used to be defined when we were selling refined
3 helium ourselves, it was defined as 5,000 cubic
4 feet in a month's time. We increased that to
5 where it would be 200,000 cubic feet over a year's
6 time, so we increased that threshold quite a bit.
7 And in doing so, we have done an analysis based on
8 our sales, what that would mean if we raised that.
9 And based on our past sales history, at the
10 200,000 cubic feet per year level, we would still
11 capture about 94 percent of federal helium demand,
12 and we felt like that was a good trade-off by
13 raising that and allowing a lot of oil users,
14 maybe the weather bureau up in Fargo, North Dakota
15 that buys a helium cylinder once a year or
16 something, not to have them be burdened by
17 purchasing higher-cost helium.
18 So we raised that threshold just to

19 major users, and it's defined as 200,000 cubic
20 feet per year, and we still, in the last calendar
21 year, we sell about 200, 202.

22 RESPONSE: 232.

23 MODERATOR: 232 million cubic feet in
24 the last calendar year.

25 Yes?

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1 COMMENT: Can you clarify what
2 a federal agency is?

3 MODERATOR: Okay. A federal agency and
4 their contractors is anybody that is doing work
5 for the federal government. If a federal agency
6 contracts an operator to do something that's
7 benefiting that federal program and federal funds
8 are expended to do that, then they're covered by
9 the regulations. And if they meet that test and
10 they're, either through past history or they're
11 expecting to consume more than 200 cubic feet in a
12 given year, then they're covered by the
13 regulation.

14 And in effect what happens is that
15 raises the cost for refined helium that they get.
16 The selling -- the company selling to them must

17 purchase an equivalent amount of crude helium at a
18 much higher price.

19 COMMENT: You say you made a
20 trade-off, because you're losing about a potential
21 6 percent of your federal helium supply, or
22 federal helium market. Do you think that you will
23 recover that over time or do you think that that
24 6 percent is forever lost or what?

25 MODERATOR: Well, the cost to

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1 administer and go out and keep up with the sales
2 out at 6 percent, we feel, would outweigh the
3 benefit to the government. So it's a matter of
4 doing a cost-benefit analysis and find a point --
5 a place where it makes sense to do that.

6 Now, what that last 6 percent, the
7 94 percent is spread across a handful of agencies.
8 If you go to that 6 percent, you increase tens,
9 tens of locations, and keeping up with that
10 skyrockets the cost of keeping up with that much
11 smaller amount of sales.

12 When we broke this up, we grouped the
13 amount of sales, and there was a natural break
14 point at this 200,000 cubic feet, and either they

15 were way over or way under. It's just a natural
16 breaking point. So it really kind of set itself
17 almost in where we should make that break point.

18 I hereby declare these proceedings
19 closed.

20 (Applause.)

21 (Hearing concluded at 8:00 p.m.)

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